

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for manufacturing a single-side mirror surface wafer, comprising:

~~a grinding step for grinding a top surface of a semiconductor after its having the top surface has been lapped;~~

~~an etching step for etching the ground semiconductor wafer; and~~

~~a double side polishing step for mirror polishing said top the top surface of the etched semiconductor wafer, while at the same time simultaneously polishing lightly a back surface of said etched the etched semiconductor wafer, wherein the top surface polishing of the semiconductor wafer is performed at a different speed than the back surface polishing of the semiconductor wafer, and wherein~~

~~said etching step comprises composite etching including an acid etching and an alkali etching which are performed in a predetermined sequence~~

the etching of the semiconductor wafer comprises a first acid etching using a first acid etching solution on the semiconductor wafer, then a second acid etching using a second acid etching solution on the semiconductor wafer, and then alkali etching the semiconductor wafer.

2. (Canceled)
3. (New) A method for manufacturing a single-side mirror surface wafer, comprising:
 - grinding a top surface of a semiconductor after the top surface has been lapped;
 - etching the ground semiconductor wafer;
 - mirror polishing the top surface of the etched semiconductor wafer, while simultaneously polishing lightly a back surface of the etched semiconductor wafer, wherein the top surface polishing of the semiconductor wafer is performed at a different speed than the back surface polishing of the semiconductor wafer,
 - wherein the top surface polishing of the semiconductor wafer is performed at a different speed than the back surface polishing of the semiconductor wafer, and
 - wherein the etching of the semiconductor wafer comprises an alkali etching on the semiconductor wafer, then an acid etching on the semiconductor wafer; and
 - wherein an amount of the alkali etching relative to an amount of the acid etching is in a ratio of 3:2.
4. (New) A method for manufacturing a single-side mirror surface wafer, comprising:
 - grinding a top surface of a semiconductor after the top surface has been lapped;
 - etching the ground semiconductor wafer; and
 - mirror polishing the top surface of the etched semiconductor wafer, while

simultaneously polishing lightly a back surface of the etched semiconductor wafer,
wherein the top surface polishing of the semiconductor wafer is performed at a
different speed than the back surface polishing of the semiconductor wafer,

wherein the etching of the semiconductor wafer comprises a first acid etching
using a first acid etching solution on the semiconductor wafer, then alkali etching the
semiconductor wafer, and then a second acid etching using a second acid etching solution
on the semiconductor wafer.